

AMENDMENTS IN THE SPECIFICATION:

1. (Currently Amended) A loop-type thermosiphon transferring heat from a cylindrical high-temperature heat source (5)-using a working fluid (22, 23), comprising:

an annular evaporator (1)-having a heat absorption portion (1a) attached to said high-temperature heat source (5)-and evaporating said working fluid by depriving said high-temperature heat source of heat through the heat absorption portion;

a condenser (3)-located above said high-temperature heat source and condensing the working fluid (23)-that has evaporated in said evaporator; and

a pipe (2, 4)-connecting said evaporator and said condenser so as to form a loop; wherein said working fluid (22)-that has passed through said condenser and has been condensed is made to fall on ~~brought in contact with~~ said heat absorption portion (1a) ~~before it is pooled in a liquid pool (21) for the working fluid in said evaporator.~~

2. (Currently Amended) The loop-type thermosiphon according to claim 1, wherein in said evaporator (1)-has the heat absorption portion (1a)-provided so as to receive said high-temperature heat source (5), ~~and~~ said working fluid condensed in said condenser is introduced so as to fall on a top portion of said heat absorption portion ~~in said evaporator from an upper portion of said evaporator.~~

3. (Currently Amended) The loop-type thermosiphon according to claim 1, wherein a flow resistance of said pipe (2)-guiding the working fluid (23)-that has evaporated in said evaporator (1)-to said condenser (3)-is made smaller than a flow resistance of said pipe (4)-guiding the working fluid (22)-condensed in said condenser (3)-to said evaporator (1).

4. (Original) The loop-type thermosiphon according to claim 1, wherein in accordance with an amount of heat transfer from said high-temperature heat source, if the amount of heat transfer is large, the flow resistance of the pipe from said condenser to said evaporator is made smaller, and if the amount of heat transfer is small, the flow resistance of the pipe

from said condenser to said evaporator is made larger.

5. (Original) The loop-type thermosiphon according to claim 1, wherein a contained amount of the working fluid refers to such a contained amount that 1/3 to 2/3 of a total volume of a possible volume of liquid pool in said condenser at an operation temperature, a volume of the pipe and a volume of the evaporator is filled with a liquid of said working fluid and a remaining volume of said total volume is filled with saturated vapor of said working fluid.

6. (Original) The loop-type thermosiphon according to claim 1, wherein a natural refrigerant is used as the working fluid.

7. (Original) The loop-type thermosiphon according to claim 1, wherein any one of carbon dioxide, water, hydrocarbon, ammonia, ethanol, and a mixture thereof is used as the working fluid.

8. (Original) The loop-type thermosiphon according to claim 1, wherein a mixture containing ethanol by at most 60% is used as the working fluid.

9. (Currently Amended) A Stirling refrigerator provided with a Stirling cooler (~~11~~); wherein said Stirling cooler includes the loop-type thermosiphon according to claim 1, said evaporator (~~1~~) exchanges heat with a high-temperature portion (~~13~~) of said Stirling cooler, and said condenser (~~3~~) is located above said high-temperature portion.